

MARTIN et al.

Application No.: 09/291,983



IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re PATENT APPLICATION of

MARTIN et al.

Application No.: 09/291,983

Group Art Unit: 3724

Filed: April 15, 1999

Examiner: C. Dexter

Title: LOW PROFILE HACKSAW

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* * * *

RULE 132 DECLARATION

I, Russell H. Powers, hereby attest as follows:

I have reviewed and am familiar with the claims and disclosure of the above-identified U.S. Patent Application Serial No. 09/291,983, entitled "Low Profile Hacksaw" (the '983 application).

I am currently employed by The Stanley Works of New Britain, Connecticut ("Stanley"), the assignee of the '983 application, in its Hand Tools & Hardware product group. I have been employed by Stanley since 1974 and since that time have worked continuously in the hand tools field, which includes hacksaws, among other things. My current position is Manager – Product Safety. At the time the hacksaw disclosed and claimed in the '983 application was invented, my duties as Manager-Product Safety included, among other things, managing Stanley's Product Assurance Laboratory, and thus I am familiar with the testing methods described hereinbelow.

I had Stanley's Product Assurance Laboratory conduct a comparative test wherein the Stanley Low Profile Hacksaw, a hacksaw sold by Stanley and embodying the subject matter of the '983 application's claim 1, was compared to three other hacksaws sold by Stanley. Each of these hacksaws is disclosed in the left-hand column of the photocopied

page attached at Appendix A. A document evidencing the test results is attached at Appendix B.

The Low Profile Hacksaw is referenced as Product ID No. 20-001 in Appendix A and as S/N 1 in Appendix B. The three hacksaws the Stanley Low Profile Hacksaw was compared against are the Stanley High Tension Hacksaw (Product ID No. 15-120; S/N 2), the Stanley Contractor Grade™ High Tension Hacksaw (Product ID No. 15-113; S/N 3) and the Stanley Contractor Grade™ High Tension Hacksaw (Product ID No. 20-115; S/N 4).

During the testing, tensile loads were applied to both ends of the subject hacksaw frame in predetermined increments. The manner in which the tensile load was applied to the hacksaw frame is illustrated in Fig. 1 on page 3 of Appendix B. At each increment, the amount of frame deflection while under tension and the amount of permanent set experienced by the frame were measured.

The results of the test are shown for each hacksaw in table format in Appendix B. For convenience's sake, the test results are compiled into two tables set forth below. The first table shows the deflection under tension for each hacksaw and the second table shows the permanent set experienced by each hacksaw.

Hacksaw Model	Deflection @ 100 Lbs Tensile Load	Deflection @ 200 Lbs Tensile Load	Deflection @ 300 Lbs Tensile Load	Deflection @ 400 Lbs Tensile Load	Deflection @ 450 Lbs Tensile Load
S/N 1	.029 inches	.058 inches	.097 inches	.141 inches	.169 inches
S/N 2	.300 inches	.662 inches	N/A*	N/A	N/A
S/N 3	.054 inches	.101 inches	.153 inches	.200 inches	.250 inches
S/N 4	.149 inches	.217 inches	.419 inches	.555 inches	.732 inches

* This sample failed after 3 seconds at 300 lbs. of tension. Thus, no measurements were taken at the 300 lbs. increment or thereafter.

Hacksaw Model	Permanent Set @ 100 Lbs Tensile Load	Permanent Set @ 200 Lbs Tensile Load	Permanent Set @ 300 Lbs Tensile Load	Permanent Set @ 400 Lbs Tensile Load	Permanent Set @ 450 Lbs Tensile Load
S/N 1	.000 inches	.000 inches	.002 inches	.017 inches	.029 inches
S/N 2	.137 inches	.428 inches	N/A	N/A	N/A
S/N 3	.007 inches	.007 inches	.011 inches	.025 inches	.048 inches
S/N 4	.001 inches	.003 inches	.017 inches	.049 inches	.097 inches

As can be appreciated from the above Figures, the Low Profile Hacksaw embodying claim 1 outperformed the other three hacksaws with respect to both frame deflection under tension and permanent set. For example, under tensions of 100 and 200 lbs., the normal range for tension in a hacksaw blade, the Low Profile Hacksaw experienced no measurable permanent set, whereas every other hacksaw tested experienced some extent of permanent set. In the higher tension load increments, the Low Profile Hacksaw continued to outperform the other hacksaws by a significant margin with respect to permanent set. Further, the Low Profile Hacksaw also outperformed the other hacksaws by a significant margin with respect to deflection while under tension.

All statements made of my own knowledge are true and all statements made on information and belief are believed to be true. I acknowledge that willful false statements and the like are punishable by fine, imprisonment, or both under 18 U.S.C. §1001 and may jeopardize the validity of the application or any patent issuing thereon.

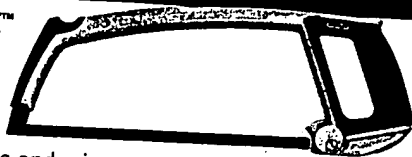
By: 
Russell H. Powers

Date: May 4, 2001

CONTRACTOR GRADE™ HIGH TENSION HACKSAW

■ Ergonomically designed bi-material frame and grip.

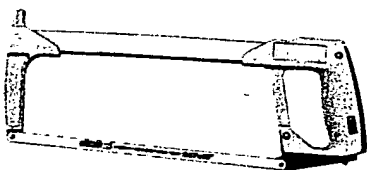
Thumb grip is designed to give better control. Fiberglass covered core absorbs more shock. Single action blade tensioning device is easy to use. Heavy duty steel reinforced core for increased cutting speed.



Product ID No.	—Depth of Throat— Inches mm		—Blade Length— Inches mm		Box/Ctn
20-115	5	125	12	305	2 / 12

CONTRACTOR GRADE™ HIGH TENSION HACKSAW

Rugged design for heavy-duty use. Fully adjustable tension—holds blade up to 32,000 p.s.i., which provides longer blade life and fast, accurate cuts. Blade storage in frame. Quick-release, blade-changing mechanism in handle. Hacksaw or reciprocating blades extended out nose of frame can be locked into place for tight clearance work.



Comfort Grip

Product ID No.	—Depth of Throat— Inches mm		—Blade Length— Inches mm		Box/Ctn
15-113	3-7/8	98	12	305	2 / 12

HIGH TENSION-LOW PROFILE HACKSAW

■ Unique arc shape frame allows for cutting in tight, hard-to-reach areas.

Deep throat allows efficient cutting of large PVC pipes. Heavy duty cast aluminum I-beam frame for strength and durability. Blade angles on both 90° and 45° axis for measured cutting. High tension knob allows for easy blade tension adjustment. Ergonomically designed handle for comfortable use.

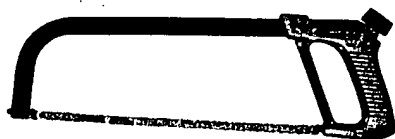


Product ID No.	—Depth of Throat— Inches mm		—Blade Length— Inches cm		Box/Ctn
20-001	4	102	12	30	0 / 2

HIGH TENSION HACKSAW

High tension frame provides up to 200 lbs. of blade tension for straighter cuts by reducing blade twisting and bending.

Strong rectangular tubular frame offers extra blade storage. Cast metal handle protects hands from work surface. Permanently mounted blade-anchor pins adjust to 8 cutting positions. Comes complete with high quality 12" bi-metal blade.



Product ID No.	—Depth of Throat— Inches mm		—Blade Length— Inches mm		Box/Ctn
15-120	4	100	12	305	2 / 12

TUBULAR FRAME HACKSAW

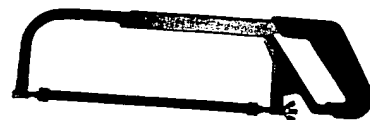
Heavy gauge tubular steel frame nickel plated—will not tarnish or rust—provides handy holding compartment for extra blades. Easy adjustment of frame for 10" (255 mm) and 12" (305 mm) blades. Blade can be faced in four directions. Rugged cast handle with guard designed to protect knuckles. Furnished with 10" (255 mm) standard carbon steel blade.



Product ID No.	—Depth of Throat— Inches mm		—Blade Length— Inches mm		Box/Ctn
15-408	3-7/8	98	10	255	2 / 12

RUBBER GRIP HACKSAW

Rigid steel frame with molded cushion grip. D-shape guard protects hand and knuckles. Adjustable frame.



Reduced Slip

Product ID No.	—Depth of Throat— Inches mm		—Blade Length— Inches mm		Box/Ctn
15-265	3-7/8	98	10	255	6 / 6

FIXED FRAME HACKSAW

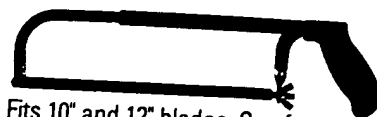
Sturdy all metal frame. Easy blade loading. Full grip protects knuckles.



Product ID No.	—Depth of Throat— Inches mm		—Blade Length— Inches mm		Box/Ctn
15-285	3-1/2	88	10	255	6 / 6

ADJUSTABLE HACKSAW

Rugged plated steel frame. Fits 10" and 12" blades. Comfort pistol grip handle.



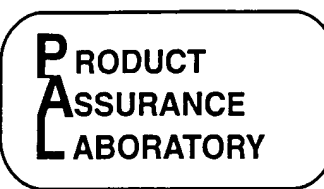
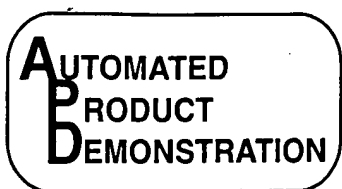
Product ID No.	—Depth of Throat— Inches mm		—Blade Length— Inches mm		Box/Ctn
15-565	2-3/4	70	10	255	6 / 6

FINE WOODWORKING QUICK RELEASE JUNIOR HACKSAW

Quick release hacksaw features a lever molded into the D-Grip handle for quick and easy blade changes and a deep throat for good work capacity. A spare blade is supplied with each hacksaw and extra replacement blades are available.



Product ID No.	—Depth of Throat— Inches mm		—Blade Length— Inches mm		Box/Ctn
15-218	5-1/2	138	6	152	10 / 100
15-905 Replacement Blade			6	152	10 / 200



12/11/1998

Test Code: 14328

By: M. Moreno

Subject: 20-001 Hacksaw, Low Profile

Description of Samples:

- 1 pc. 20-001 Stanley low profile high tension hacksaw, S/N 1.
- 1 pc. 15-120 Stanley Professional high tension hacksaw, S/N 2.
- 1 pc. 15-113 Stanley Contractor Grade high tension hacksaw, S/N 3.
- 1 pc. 20-115 Stanley Contractor Grade "Turbo Cut" high tension hacksaw, S/N 4.

Test Results:

4.4.1 - Application of Tension Load Between Saw Grips (GGG-F-671b): Deflection and permanent set is to be recorded at the following tensile loads applied on both ends of the frame: 100, 200, 300, 400, and 450 lbs, see Fig. 1, page 4.

S/N 1:

<u>Hang</u> <u>Weight:</u>	<u>Tensile</u> <u>Load:</u>	<u>Deflection:</u>	<u>Permanent Set:</u>
20 lbs.	100 lbs.	.029"	.000"
40 lbs.	200 lbs.	.058"	.000"
60 lbs.	300 lbs.	.097"	.002"
80 lbs.	400 lbs.	.141"	.017"
90 lbs.	450 lbs.	.169"	.029"

Results: Sample met the max. load requirement with no damage.

S/N 2:

<u>Hang</u> <u>Weight:</u>	<u>Tensile</u> <u>Load:</u>	<u>Deflection:</u>	<u>Permanent Set:</u>
20 lbs.	100 lbs.	.300"	.137
40 lbs.	200 lbs.	.662"	.428"
60 lbs.	300 lbs.	---	---
80 lbs.	400 lbs.	---	---
90 lbs.	450 lbs.	---	---

Results: Sample held 300 lb. load for a total of 3 seconds, then failed. Blade retaining pin (nearest handle) sheared, and 2 small pieces broke from the upper part of aluminum handle frame.

Stanley Tools
Product Assurance Laboratory

12/11/1998

Test Code: 14328

By: M. Moreno

Subject: 20-001 Hacksaw, Low Profile

Description of Samples:

- 1 pc. 20-001 Stanley low profile high tension hacksaw, S/N 1.
- 1 pc. 15-120 Stanley Professional high tension hacksaw, S/N 2.
- 1 pc. 15-113 Stanley Contractor Grade high tension hacksaw, S/N 3.
- 1 pc. 20-115 Stanley Contractor Grade "Turbo Cut" high tension hacksaw, S/N 4.

Test Results:

4.4.1 - Application of Tension Load Between Saw Grips (GGG-F-671b): Deflection and permanent set is to be recorded at the following tensile loads applied on both ends of the frame: 100, 200, 300, 400, and 450 lbs, (Cont.).

S/N 3:

Hang Weight:	Tensile Load:	Deflection:	Permanent Set:
20 lbs.	100 lbs.	.054"	.007"
40 lbs.	200 lbs.	.101"	.007"
60 lbs.	300 lbs.	.153"	.011"
80 lbs.	400 lbs.	.200"	.025"
90 lbs.	450 lbs.	.250"	.048"

Results: Sample met the max. load requirement with no damage.

S/N 4:

Hang Weight:	Tensile Load:	Deflection:	Permanent Set:
20 lbs.	100 lbs.	.149"	.001"
40 lbs.	200 lbs.	.217"	.003"
60 lbs.	300 lbs.	.419"	.017"
80 lbs.	400 lbs.	.555"	.049"
90 lbs.	450 lbs.	.732"	.097"

Results: Sample met the max. load requirement with no damage.

Stanley Tools
Product Assurance Laboratory

12/11/1998

Test Code: 14328

By: M. Moreno

Subject: 20-001 Hacksaw, Low Profile

Description of Samples:

- 1 pc. 20-001 Stanley low profile high tension hacksaw, S/N 1.
- 1 pc. 15-120 Stanley Professional high tension hacksaw, S/N 2.
- 1 pc. 15-113 Stanley Contractor Grade high tension hacksaw, S/N 3.
- 1 pc. 20-115 Stanley Contractor Grade "Turbo Cut" high tension hacksaw, S/N 4.

Test Results:

